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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,534	11/09/2001	Isaac B. Horton III	1300-016	2599

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EXAMINER

STRECKER, GERARD R

ART UNIT	PAPER NUMBER
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2862

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/007,534

Applicant(s)

Horton III

Examiner

G. R. Strecker

Group Art Unit

2862

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-31 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-31 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☒ The drawing(s) filed on 11/09/81 is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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At page 1, line 4 of the specification, the status of Applicant's parent application should be updated.

The drawings are objected to because block 24 in Figure 1 should be labeled. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The disclosure is objected to because of the following informalities: at page 5, line 11, "12" should be---24---.

Appropriate correction is required.

Claims 1-31 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Independent claim 1 recites a portal-based appliance system for UV disinfection including a portal positioned on a container housing and independent claim 20 recites a portal system for UV disinfection comprising a portal for receiving UV light. The portal and associated system are described at page 5 of the specification with respect to Figure 1. It is stated at page 5, lines 15, 16, that the portal (identified by number 22) is equipped with an interface device 32 that controls the interface between the portal and the interior of the appliance or container. The interface device is described as being preferably UV transmissive and an interface optical device or devices. A variety of suitable interface optical devices or portal optics are discussed at pages 6 and 7. The portal, interface device and container, however are merely shown in the form of

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blocks in Figure 1. It is not clear from such a showing how the portal 22 and interface 23 are structurally configured and how they structurally cooperate. Nor is it apparent how the structure of interface 33 is affixed to container 24 and how the ultraviolet light is enabled to pass through the container.

Claims 1-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1; at line 3 it is not clear how the container of line 3 is related to the container of line 2. Further, it is not clear from the claim language what the portal does with the received UV light and whether the light is received before or after it is input into the container. In claim 5 it is not clear how the appliance components are related to the housing of claim 1. In claims 8 and 26, it is not clear at line 2 what constitutes the "portal opening" and the interior of "the appliance". In claim 20, it is not clear what the at least one portal has to do with the disinfection of appliances.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 6, 8, 9, 14, 20 and 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Donahue (4,337,119).

Donahue discloses (Fig. 5) a portal-based appliance system for ultraviolet disinfection of interior contents of a fluid treatment container comprising a container having a housing 11 with a portal (cap 44 with opening 44a) positioned on the housing for receiving UV light input into the container from a UV light source 45. The portal includes a UV transmissive optical component interface device (ring 47 and protective quartz shield 46).

Claims 1, 5, 6, 8, 9, 14, 20 and 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Veloz (3,589,862).

Veloz discloses (Fig. 1) a portal-based appliance system for UV disinfection of the interior of a fluid treatment container comprising a container 10 having a housing 12, 14 with a portal (opening 40 and gasket 42) positioned on the housing for receiving UV light into the container from UV light source 60. The portal includes a UV transmissive optical component interface device (quartz plate 70) which provides a protective function.

Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saveliev et al (6,216,918) in view of Donahue or Veloz.

Saveliev et al discloses (see Fig. 9 and col. 26, line 21-col. 28, line 25) an appliance system for UV disinfection of the interior surface of a container comprising a container (keg 22) having a housing with an optical component interface (distribution lens 148) located at the top of

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the keg housing. Although the manner in which the lens optical component interface is located at the top of the keg housing is not disclosed, a portal would necessarily be required to mount the lens. The lens is connected to a fiber optic transmission line (146). UV light from a UV light source 144 is input into the container via the optic transmission line 146 and lens 148.

Donahue and Veloz are discussed above.

It would have been obvious to one skilled in the art, at the time of the invention, to include the optical interface lens 148 of Saveliev et al located at the top of keg 22 as part of a portal, as taught by Donahue and Veloz. Such would be motivated by the need to fix the lens 148 to the keg for carrying out its purpose of distributing the ultraviolet light. Inclusion of a fastener (claims 4, 23) for fastening the transmission line to the portal and a photo-catalyst as part of the portal optic (claims 12, 13, 30, 31) would involve merely the implementation of known techniques for coupling and protecting optical components, respectively. Further, although Saveliev et al employs the UV disinfecting system in conjunction with a fluid storage and dispensing appliance container, it would have been obvious to one skilled in the art to apply the UV disinfecting system of Saeliev et al to any container requiring disinfection or sterilization of the contents, such as those recited in various dependent claims, to provide an efficient and effective solution to the protection of such containers from contamination.

Limura and Gonzalez et al are made of record to show UV systems using photo catalysts.

Ellner, Merriam, Reber et al and Meacham, Jr. et al are made of record to show UV systems for sterilizing, disinfecting or purifying.

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Any inquiry concerning this communication should be directed to G. R. Strecker at telephone number (703) 305-4939.

G R STRECKER/pj

05/14/03

Gerard R. Strecker
GERARD R. STRECKER
PRIMARY EXAMINER